

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for manufacturing a light-emitting device with compound semiconductor comprising; ~~a first step of:~~

forming an n-semiconductor layer, an activated layer, and a p-semiconductor layer, in order, on ~~the~~ top of a double substrate;

~~a second step of making at least a part of the n-semiconductor layer exposed by a mesa-cut in a vertical direction from the a p-semiconductor layer to a part of the n-semiconductor layer;~~

~~a third step of forming a transparent electrode for extending an electric current on the top of the p-semiconductor layer and activating the p-semiconductor layer under the condition of using an oxygen plasma;~~ and

~~a fourth step of forming each of an n- pad electrode and a p-pad electrode on the top of the transparent electrode for extending an electric current.~~

2. (Currently Amended) The method ~~for manufacturing light emitting device with compound semiconductor~~ of claim 1, wherein said double substrate is a sapphire substrate.

3. (Currently Amended) The method ~~for manufacturing light emitting device with compound semiconductor~~ of claim 1, wherein one or more of the said n-semiconductor and p-semiconductor layer is a Group III-V compound semiconductor layer.

4. (New) The method of claim 1, wherein the transparent electrode is directly formed on the p-semiconductor layer without having an oxide layer formed first on a surface of the p-semiconductor layer facing the transparent electrode.

5. (New) A light-emitting device comprising:
a double substrate;
an n-semiconductor layer, an activated layer, and a p-semiconductor

layer, formed in order, on top of the double substrate;

an oxygen-plasma-activated transparent electrode for extending an electric current formed on the top of the p-semiconductor layer;

a p-pad electrode formed on the top of the transparent electrode for extending an electric current; and

an n-pad electrode formed on part of a mesa-cut section of the n-semiconductor layer for extending an electric current.

6. (New) The device of claim 5, wherein said double substrate is a sapphire substrate.

7. (New) The device of claim 5, wherein one or more of the n-semiconductor and p-semiconductor layer is a Group III-V compound semiconductor layer.

8. (New) The device of claim 5, wherein the transparent electrode is directly formed on the p-semiconductor layer without having an oxide layer formed first on a surface of the p-semiconductor layer that is between the p-semiconductor layer and the transparent electrode.